What is claimed is:

1. A retardation film comprising:

a transparent support positioned in a plane; and

at least one optically anisotropic layer having a first direction with a smallest refractive index,

wherein said at least one optically anisotropic layer is formed of at least one compound exhibiting a liquid crystal phase; said at least one optically anisotropic layer exhibits biaxiality; and the first direction is substantially orthogonal to a direction normal to the plane of the transparent support.

2. The retardation film as claimed in claim 1, wherein the liquid crystal phase is a biaxial liquid crystal phase.

3. The retardation film as claimed in claim 2, wherein the biaxial liquid crystal phase is a biaxial nematic liquid-crystal phase.

4. The retardation film as claimed in claim 1, wherein said at least one optically anisotropic layer has a second direction with a largest refractive index, and the second direction is substantially orthogonal to a direction normal to the plane of the transparent support.

5. The retardation film as claimed in claim 1, wherein said at least one optically anisotropic layer has a support-side interface and an air interface; an angle defined by the first direction and the normal direction of the transparent support is from 75° to 105° at both of the support-side interface and the air interface; and an angle defined by the second direction and the normal direction of the transparent support is from 75° to 105° at both of the support-side interface and the air interface.

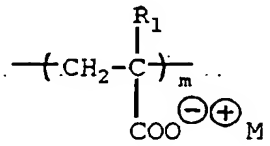
6. The retardation film as claimed in claim 4, which further comprises an alignment film between the transparent layer and said at least one optically anisotropic layer.

7. The retardation film as claimed in claim 2, wherein the compound exhibiting the biaxial liquid crystal phase is at least one of a polymerizable compound and a polymer compound.

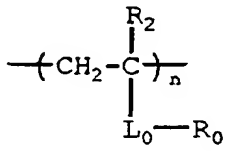
8. The retardation film as claimed in claim 6, wherein the alignment film comprises a polymer having at least one of a hydrophobic group and an exclude-volume group.

9. The retardation film as claimed in claim 8, wherein the polymer comprises an acrylic or methacrylic acid copolymer comprising a repeating unit represented by the following formula (I) and a repeating unit represented by the following formula (II) or (III):

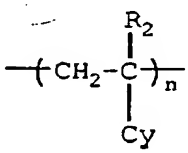
(I)



(II)



(III)



wherein R_1 represents a hydrogen atom or a methyl group; R_2 represents a hydrogen atom, a halogen atom or an alkyl group having from 1 to 6 carbon atoms; M represents a proton, an alkali metal ion or an ammonium ion; L_0 represents a divalent linking group selected from the group consisting of -O-, -CO-, -NH-, $-SO_2-$, an alkylene group, an alkenylene group, an arylene group and a combination thereof; R_0 represents a hydrocarbon group having from 10 to 100 carbon atoms or a fluorine atom-substituted hydrocarbon group having from 1 to 100 carbon

atoms; C_y represents an aliphatic ring group, an aromatic group or a heterocyclic group; m is from 10 to 99 mol%; and n is from 1 to 90 mol%.

10. The retardation film as claimed in claim 1, wherein said at least one optically anisotropic layer is not stretched.

11. An elliptically polarizing film comprising a retardation film claimed in claim 1 and a polarizing film.